FOREWORD

This study of pollution and pollution abatement in Boston Harbor and Massachusetts Bay has been a model partnership between federal, state, and private entities (the U.S. Geological Survey, the Massachusetts Water Resources Authority, the U.S. Coast Guard, and the Woods Hole Oceanographic Institution). The multi-disciplinary research program mapped the geology of the seafloor, carried out long-term oceanographic and geochemical observations, and developed numerical models of sediment transport to understand the distribution, transport, and fate of contaminants in this coastal system that has received wastes since colonial times. The application of program results has saved millions of dollars of public money in construction costs during the \$4 billion modernization of greater Boston's wastewater treatment facilities, documented subsequent reductions in contaminant concentrations in harbor sediments, provided scientific information in public forums, and improved our understanding of where and how contaminants accumulate over the long-term. The continuing focus of the program is to improve our ability to predict the fate of sediments and associated contaminants in this and other coastal environments; providing the scientific basis for decision-making.

Reducing coastal pollution requires cooperation from many components of society. In the case of Boston Harbor, local citizens, environmental groups, federal and state courts, the state legislature, industry, and numerous state and federal agencies all worked to implement the harbor cleanup. It has been tremendously satisfying for participants in this USGS -MWRA-USCG-WHOI partnership to contribute, with the efforts of so many others, toward a cleaner, healthier coastal environment.

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